

## **Amendments to the Claims**

### **Claims 1-5. (Cancelled)**

6. (New) A device for rotary machining of rotors, in particular rotors of gas turbines, on machining surfaces facing radially inward, wherein a rotor has at least two rotor disks which are in close proximity axially and have thick hub areas axially and central hub bores and are connected on an outside radially via projections, with a drill rod extending essentially in an axial direction and being held in a rotationally fixed manner and a tool mount holding a lathe tool and extending essentially radially, wherein the drill rod has a projection extending essentially radially and coupleable to the tool mount extending essentially radially, wherein radial dimensions of the projection of the drill rod and of the tool mount are adapted to a dimension of a hub bore of the rotor to be machined, such that the drill rod and the tool mount are insertable in an uncoupled state into the hub bore, and wherein, in a coupled state, the lathe tool mounted in the tool mount is abutable with a machining surface of the rotor facing radially inward, and wherein the lathe tool is movably mounted in the tool mount via a lathe tool holder, wherein the lathe tool is pivotable primarily axially together with the lathe tool holder with respect to the tool mount, and wherein a drive shaft is guided in the drill rod, and wherein the drive shaft is coupled to the lathe tool holder via a gear, wherein the gear converts a driving movement of the drive shaft into a pivoting movement of the lathe tool holder.

7. (New) The device according to Claim 6, wherein the gear is formed by at least one gearwheel extending in the projection of the drill rod and by a worm gear extending in the tool mount and having a gearwheel allocated to the worm gear.

8. (New) The device according to Claim 7, wherein several gearwheels are located in the projection of the drill rod, wherein a first gearwheel is coupled to the drive shaft and a second gearwheel is coupled to the gearwheel allocated to the worm gear.

9. (New) The device according to Claim 7, wherein the worm gear acts on the lathe tool holder, wherein the lathe tool holder is designed as a segment of the worm gear.

10. (New) The device according to Claim 6, wherein a line is integrated into the drill rod and into the tool mount, wherein the line carries a coolant and/or a lubricant in a direction of the lathe tool.

11. (New) An apparatus for rotary machining of a rotor, comprising:

    a drill rod extending in an axial direction and being held in a rotationally fixed manner and including a projection coupled to the drill rod and extending in a radial direction;

    a tool mount coupleable to the projection; and

    a lathe tool extending in the radial direction and coupled to the tool mount, wherein the lathe tool is pivotably moveable on the tool mount in the axial direction.

12. (New) The apparatus according to Claim 11, wherein the lathe tool is fixedly mounted in a lathe tool holder and wherein the lathe tool holder is pivotably mounted in the tool mount.

13. (New) The apparatus according to Claim 12, further comprising a drive shaft disposed within the drill rod, wherein the drive shaft is coupled to the lathe tool holder via a gear, and wherein the gear converts a rotation of the drive shaft into a pivoting movement of the lathe tool holder.

14. (New) The apparatus according to Claim 11, further comprising a drive mechanism, wherein the drive mechanism pivotably moves the lathe tool.

15. (New) The apparatus according to Claim 14, wherein the drive mechanism is a manually driven crank.

16. (New) The apparatus according to Claim 14, wherein the drive mechanism is an electric motor.

17. (New) A method of rotary machining of a rotor, comprising the steps of:  
    inserting a lathe tool into a chamber defined between two rotor disks of  
    the rotor, the lathe tool extending radially with respect to the two rotor disks;  
    engaging the lathe tool with a radially internal weld between the two rotor  
    disks;  
    holding the lathe tool rotationally stationary; and  
    pivotably moving the lathe tool in an axial direction to machine the weld.

18. (New) The method according to Claim 17, further comprising the steps of:  
    inserting a drill rod into the rotor; and  
    coupling a tool mount to the drill rod within the rotor, wherein the lathe  
    tool is disposed on the tool mount.

19. (New) The method according to Claim 17, further comprising the step of  
    rotating a drive shaft to pivotably move the lathe tool.

20. (New) The method according to Claim 17, further comprising the step of  
    rotating the rotor.

21. (New) The method according to Claim 18, further comprising the step of  
    holding the drill rod axially stationary during a machining process.